

S/598/61/000/006/006/034
D245/D303

AUTHORS: Sergeyev, V.V., Golov, A.G., Kushkin, B.N., and Sokolon, I.I.

TITLE: Separation of drilled reaction mass

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 6, 1961. Metallotermiya i elektro-khimiya titana, 38 - 40

TEXT: The authors studied the separation of Ti sponge from the reaction mass by drilling methods which they consider to have the following advantages: Equally good quality of Ti sponge, less contamination of the sponge with Fe, economy in labor and ease of mechanization. The main drawback of the drilling method is the need to carry out the operations in a room with a dry atmosphere and the criteria of humidity control for this purpose are specified as a maximum air humidity of 0.1 - 0.2 g/cubic meter and an air consumption of 700 - 1000 nm³/hour. There are 1 figure and 2 tables.

Card 1/1

SERGEYEV, V.V.; GOLOV, A.G.; KUSHKIN, B.N.; SOKOLON, I.I.

Separation of the burned-out reaction products. Titan i ego splavy
no. 6:38-40 '61. (MIRA 14:11)

(Titanium--Metallurgy)

SANDLER, R.A.; STRELETZ, Kh.L.; GARMATA, V.A.; RODYAKIN, V.V.; ARUTYUNOV, E.A.;
PETRUN'KO, A.N.; SOKOLOV, I.I.; Prinimali uchastiye: USTINOV, V.S.;
KISHLEV, O.G.; PEREPICHAY, A.G.; MARICHEV, A.A.; YELISEYEVA, I.B.;
SMOL'SKIY, I.Ya.; GOLOV, A.O.

Effect of the rate of feeding titanium tetrachloride into the reactor
on the indices of the magnesium thermal reduction process. TSvet. mat.
37 no.10:58-60 0 '64. (MIRA 18:7)

GOLOV, A.N.

Changing the design of rollers of the receiving and washing
machines of a sheet-metal hot-tinning unit. Sbor. rats.
predl. vnedr. v proizv. no.2:20-21 '61. (MIRA 14:7)
(Tinning--Equipment and supplies)

KLIMOV, Yu.M.; CHIKIN, V.V.; ANISIMOV, N.I.; BARSKOV, I.M.; VINOGRADOV, Yu.V.; GAVRILOV, A.N.; GAUKHMAN, L.A.; GOLOV, A.P.; GOL'DMAN, L.S.; GHEBENNIKOV, G.I.; YEFIMOV, A.N.; ZALUTSKIY, M.S.; ZAYTSEVA, A.V.; OIYRTSH, A.I.; KANDARITSKIY, V.S.; KAPRANOV, I.A.; KOVALEV, N.I.; KOVALENVSKIY, K.A.; KOLOSOV, A.F.; KRIVOV, A.S.; KRYLOV, R.M.; LEVITAS, A.G.; MALYGIN, M.A.; MORALEVICH, Yu.A.; MOTYLEV, A.S.; NESTKROV, M.V.; NIKOL'SKIY, A.V.; OHLOV, G.M.; OHLOV, Ya.L.; PARENISKIY, V.M.; POLYAKOV, A.S.; HUBIN, V.I.; SVANIDZE, K.N.; STRIGIN, I.A.; TAKOYEV, K.F.; TRUBNIKOV, S.V.; CHERNYSHEVA, L.N.; CHESNOKOV, N.Ye.; SHAMBERG, V.M.; STRUMILIN, S.G., akademik, red.; ANTOSHENKOVA, L., red.; MIKAELIAN, E., red.; MUKHIN, Yu., tekhn.red.

[Dictionary of the seven-year plan from A to Z] Slovar' semiletki
ot A do IA. Moskva, Gos.isd-vo polit.lit-ry, 1960. 397 p.
(MIRA 13:7)

(Russia--Economic policy)

GOLOV, Aleksey Pavlovich; OSADA, P.A., red.; GORSHUNOVA, M.D., red.; PONOMARE-
VA, A.A., tekhn. red.

[Planning organizational and technical measures at an enterprise] Planirovaniye organizatsionno-tekhnicheskikh meropriyatii na predpriyatii. Pod red. M.D.Gorshunova. Izd.2., perer. i dop. Moskva, Gos. izd-vo planovo-ekon. lit-ry, 1961. 173 p. (MIRA 14:8)
(Industrial management)

MALEVANAYA, Sof'ya Vasil'yevna; KOZLOVSKIY, Pavel Rostislavovich;
MAKSIMOV, Viktor Ivanovich; GOLOV, Aleksey Savinovich;
DERIGLAZOV, Ivan Ivanovich; BAKKAL, R.A., otv. red.; BELOV,
V.S., red. isd-va; IL'INSKAYA, G.M., tekhn. red.

[Overall mechanization and automation of underground transportation in coal mines] Kompleksnaya mekhanizatsiya i avtomatizatsiya podzemnogo transporta na ugol'nykh shakhtakh. [By] S.V. Malevannaya i dr. Moskva, Gosgortekhnizdat, 1963. 171 p.
(MIRA 16:6)

(Mine haulage) (Automatic control)

GOLCOV, A.YE.

GOLCOV, A.Ye.

Making of hydrogeological maps in the Polish People's Republic.
Razved. i okh. nedr 23 no.9:53-55 & '57. (MIRA 10:11)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Poland--Water, Underground--Maps)

HELIVAYEVSKIY, N.A.; GOLOV, A.Ye.

Results of the anniversary session of the Geological Institute (Warsaw,
1960). Sov. geol. 3 no.8:142-147 Ag '60. (MIRA 13:9)
(Poland--Geology)

BEKYAYEVSKIY, N.A.; OGLOV, A.Ye.

Results of the conference of representatives of geological
depart. ant of member countries of the Council of Mutual
Economic Assistance in the Generalization of Experience in
Compiling Geological Maps. Sov. geol. 3 no. 9:149-152
S '60. (MIRA 13:11)

1. Ministerstvo geologii i okhrany neдр SSSR.
(Geology--Maps)

BELYAYEVSKIY, N.A.; GOLOV, A.Ye.

Activity of the Geological Institute of the Polish People's
Republic. Sov. geol. 3 no.10:157-161 0'60.
(Poland--Geology)

(MIRA 13:10)

GOLOV, A.Ie.; KOLOMENSKIY, N.V.; FOMIN, V.M.

Results of the conference of the member nations of the Economic
Aid Council on mapping for engineering geology purposes. Sov.geol.
4 no.5:151-153 My '61. (MIRA 14:6)

1. Ministerstvo geologii i okhrany neдр SSSR.
(Engineering geology--Maps)

GOLOV, A. Ye.; KUZNETSOV, Ye.A.; PUSHCHAROVSKIY, Yu. M.

Activities of the Polish Geological Society. Biul. MOIP. Otd.
geol. 36 no.1:155-158 Ja-F '61. (MIRA 14:5)
(Poland—Geological societies)

BELIAYEVSKIY, N.A.; GOLOV, A.Ye.

Results of the Conference for the Study of Subsurface Geology
of Member Countries of the Council of Mutual Economic Assistance.
Sov.geol. 5 no.4:138-140 Ap '62. (MIRA 15:4)

.. Ministerstvo geologii i okhrany nedr SSSR.
(Geology--Congresses)

GOLOV, A.Ye.; KOLONENSKIY, N.V.; SMIRNOV, L.N.

[Problems of the unification of research from the viewpoint of engineering geology; materials accepted as typical by the Second Conference of the Administrators of Geological Bodies, members of the mutual Economic Assistance Council]
Voprosy unifikatsii inzhenerno-geologicheskikh issledovaniy; materialy, prinyatye v kachestve tipovykh Vtorym soveshchaniem rukovoditelei geologicheskikh organov - chlenov SEV. Moskva, Izd-vo "Nedra," 1964. 42 p. (MIRA 17:4)

GOLOS, B.A.

Live trap for the subterranean vole. Biol.MOIP.Otd.biol. 59 no.5:
95-96 S-O '54. (MLRA 8:1)
(Trapping) (Field mice)

GOIKV, B. A.

"Rodents---The Blight of Young Crops of Fodder Grass, Natural Pasture
Lands, and Hay Harvests." Cand Biol Sci, Moscow Order of Lenin State U
ineni M. V. Lomonosov, 1 Oct 54. (VM, 21 Sep 54)

SO: Sum 432, 29 Mar 55

GOLOV, B.A.; OSMOLOVSKAYA, V.I.

Biology and economic significance of the magpie in natural and
artificial forest plantations in the southeastern European part
of the U.S.S.R. Trudy Inst.geog. no.66:257-273 '55. (MIRA 8:7)
(Magpies)

GOLOV, B.A.

Trep for mole rats. Zool. zhur. 40 no.7:1110-1111 J1 '61.

(MIRA 14:7)

1. Agricultural Institute of Paltava.

(Mole rats) (Trapping)

GOLOV, D. (g.Kiyev); PYATIGORSKIY, B. (g.Kiyev)

Two-channel measuring amplifier. Radio no.4:49-51 Ap '61.
(MIRA 14:7)
(Medical electronics)

GOLOV, D.A.; KOSTYUK, P.G.

Cascade of an amplifier for the intracellular lead of electric potentials. Fisiol. zh. SSSR 42 no.1:114-117 Ja 56. (MIRA 9:5)

1. Institut fiziologii zhivotnykh pri Kiyevskom universitete imeni T.G. Shevchenko.

(ELECTROPHYSIOLOGY, apparatus and instruments,
inlet cascade for reinforcing appliance for intracellular
lead of electric potentials (Rus))

GUREVICH, M.I. [Hurevych, M.I.]; GOLOV, D.A. [Holov, D.O.]; IL'CHEVICH, N.V. [Il'chevych, M.V.]; KOZAK, V.A.; KONDRATOVICH, M.A.; KVITNITSKIY, M.Ye. [Kvitnyts'kiy, M.IE.]; MARTYENKO, A.G. [Martynenko, A.H.]; BRATUS', V.V.

Some problems in the physiology and pathology of underwater swimming; study of the functional state of the cardiovascular system in underwater swimming. Fiziol. zhur. [Ukr.] 8 no.3: 309-318 My-Je '62. (MIRA 15:6)

1. Laboratoriya fiziologii krovooobrashcheniya Instituta fiziologii im. Bogomol'tsa AN USSR, Kiyov.
(CARDIOVASCULAR SYSTEM)
(SWIMMING) (UNDERWATER PHYSIOLOGY)

POVZHITKOV, M.M. [Povzhytkov, M.M.]; GOLOV, D.A. [Holov, D.A.]

Determination of the minute volume of the blood using the thermo-dilution method. Fiziol.zhur. [Ukr.] 11 no.4:548-550 J1-Az '65.

(MIRA 18:10)

1. Laboratoriya fiziologii krovotrascheniya Institute fiziologii im. Bogomol'tsa AN UkrSSR, Kiev.

GUREVICH, M.I. [Hurevych, M.I.]; BERSHTEYN, S.A.; GOLOV, D.A. [Holov, D.O.]

Device for the synchronous recording of changes in oxygen tension
and tissue blood stream. Fiziol. zhur. [Ukr.] 11 no.6:840-844
N-D '65, (MIRA 19:1)

1. Laboratoriya fiziologii krovobrascheniya Instituta fiziologii
im. Bogomoletsa AN UkrSSR, Kiev.

GOLOV, G. inzh. (Novgorod)

The time has come. Zhil.-kom. khoz. 13 no.4:14-15 Ap '63.
(MIRA 16:5)

(Apartment houses--Maintenance and repair)

ACC NR: AP6036870

SOURCE CODE: UR/0219/66/062/011/0035/0039

AUTHOR: Golov, G. A. (Moscow)

ORG: none

TITLE: Changes in gas metabolism and oxygen saturation in human arterial blood under the influence of transverse accelerations

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 62, no. 11, 1966, 35-39

TOPIC TAGS: biologic acceleration effect, respiratory system, oxygen saturation, acceleration tolerance

ABSTRACT: Accelerations of 4, 6, 8, 10, and 12 G, applied in the back-chest direction at an 80° angle in 12 men, ages 24—35 yr, were used to study gas metabolism in the lungs and oxygen saturation of arterial blood. With all accelerations, the gas metabolism level was higher than the initial level, with a maximum at 8G. The type of changes noted in the percentile gas composition of alveolar air (lowered CO₂ content and raised O₂ concentration with increased acceleration) suggests a disruption of gas metabolism in the lungs during accelerations. All levels of acceleration were accompanied by a decrease of oxygen saturation in the arterial blood; the rate of decrease rose with increase in acceleration. In experiments with limited exposure time at 8 and 12 G, the saturation of the arterial blood at the end of the

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UDC: 612.23+612.127.2].014.47:531:113

ACC NR: AF6036870

exposure reached 60—65% of the initial level, which supports the idea that one of the basic factors limiting acceleration tolerance is the state of oxygen balance of the organism. Orig. art. has: 3 figures, 2 tables.

SUB CODE: 06/ SUBM DATE: 06Mar66/ ORIG REF: 004/ OTHER: 008/
ATD PRESS: 5107

Card 2/2

1 18079-63

ES(1)/ES(2)/ES(3)/ES(4)/ES(5) AND/AFTC/AFSC

ACCESSION NR: AP3005652 A/10

8/0219/63/056/007/0024/0029

AUTHOR: Barer, A. S.; Golov, G. A.; Zubavin, V. B.; Tikhomirov, Ye.

P.

TITLE: Physiological body reactions of the human organism during action of maximal (in time and value) acceleration directed along the back-chest axis. Report 1: Tolerance limits and basic trend of physiological reactions

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny*, v. 56, no. 7, 1963, 24-29

TOPIC TAGS: acceleration, physiological body reaction, maximum tolerance, cardiovascular system, respiratory system

ABSTRACT: To determine the maximum tolerances to accelerations acting along the back-chest axis at an angle of 65° , 45 men aged 24-34 in a series of 203 experiments were subjected to accelerations ranging from 4 to 15 g on a large centrifuge radius. The following were studied: cardiovascular system, external respiratory system, coordination of movements, bioelectric activity of the brain, bioelectric activity of skeletal muscles, and subjective sensations of the sub-
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ACCESSION NR: AP3005652

jects. Television and movies were used during the experiments. Reactions of the subjects to the mean acceleration values of 6-10 g can be divided into 4 stages. 1. Adaptation to external environment, characterized by significant increases in all systems and functions under study. 2. Resistance as the functional level of the systems decreases and the energetic level of response reactions becomes exhausted (gradual voltage decrease in the electromyograms and ECG and EEG shifts). 3. Adaptation collapse and functional discoordination. 4. Recovery, starting from the moment the centrifuge stops. For higher accelerations the highest functional levels of the systems are evoked and these in turn lead to exhaustion and the collapse of compensatory reactions. The limiting factors for high acceleration rates (12 to 15 g) are cardiovascular and external respiratory functional disturbances. The maximum tolerance for 6 g is 653 seconds, for 8 g 186 seconds, for 10 g 58 secs, for 12 g 28 secs, for 14 g 18 secs, and for 15 g 10 secs. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 16Aug62

DATE ACQ: 21Aug63

ENCL: 00

Card 2/2 SUB CODE: AM NO REF SOV: 004

OTHER: 005

BAKER, A. S.; GOLON, G. A.; ZUBAVIN, V. V.; MURAKHOVSKIY, K. I.; RODIN, S. A.; SOROKINA,
Ye. I.; TIKHOMIROV, Ye. P.

"Physiological reactions of the human organism to transverse accelerations and
means of raising the resistance to such forces."

report presented at the 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

ACC NR: AT7011650

SOURCE CODE: UR/0000/66/000/000/0211/0212

AUTHOR: Daxer, A. S.; Golov, G. A.; Zubavin, V. B.; Sorokina, Ye. I.;
Tikhomirov, Ye. P.

ORG: none

TITLE: Oxygen balance of an organism at prolonged accelerations

SOURCE: International Astronautical Congress. 17th, Madrid, 1966. Doklady.
no. 12. 1966. Kislorodnyy balans organizma pri dlitel'noyestvuyushchikh
uskoreniyakh

TOPIC TAGS: biologic acceleration effect, animal physiology, dog,
hypoxia, space physiology, human physiology

ABSTRACT:

The author reviewed the literature as well as experiments on humans (1500 tests using 120 subjects) and white rats (375 tests). He stated that changes in oxygen balance in humans are one of the main factors limiting prolonged G tolerance. This is primarily due to circulatory and respiratory functions which are directly affected by accelerations. The magnitude of these changes depends on the magnitude and duration of accelerations.

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ACC NR: AT7011650

Changes in external respiration including gas exchange during accelerations can be attributed to biomechanical difficulties and disrupted pulmonary circulation. Here, increased work by diaphragm muscles increases oxygen consumption. At high acceleration magnitudes (12 G and higher), this disruption of gas exchange renders the entire external respiratory process "unprofitable," or inefficient.

Up to 8-12 G, there is an increase in the activity of pulmonary ventilation reflected in accelerated respiration and an increase in per-minute volume. A further increase in acceleration magnitude leads first to relative and then to an absolute decrease in volumetric indices of external respiration. With an increase in acceleration, there is a steady 200 ml/G decrease. An increase in the per-minute respiratory volume in the 8-12 G range is associated with increased O_2 consumption and elevated CO_2 elimination. However, the relative efficiency of pulmonary ventilation decreases as acceleration magnitude increases. The percentage content of O_2 in respired air increases while CO_2 decreases. An analysis of the literature and data from the author's experiments indicate that the nature of qualitative changes in the gaseous composition of respired air is associated with an

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ACC NR: AT7011650

increase in physiologically dead space due to changes in pulmonary circulation. Accelerations cause arterial hypoxemia, the severity of which depends on acceleration magnitude and duration. Beyond a dependence on acceleration magnitude, the level of hemoglobin decreases by 60—65%. The general oxygen requirement under these situations also does not depend on acceleration magnitude and is a constant value.

The circulatory system plays a leading role in supplying oxygen to the brain during acceleration. In experiments on human subjects, cerebral circulation and circulation in external vessels of the head were monitored. The force vector of acceleration plays an important part here, especially the longitudinal component. When the value of this component reaches 1.6—1.8 G, there is an increase in the pulsed pooling of cerebral vessels. At 3 G, a normal situation prevails while at 5 G, blood pooling decreases by a factor of two. EEG data was used as an index of the state of cerebral circulation.

In experiments with animals, general oxygen consumption, oxygen tension in tissues, and the tissue

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ACC NR: AT7011650

oxidation reduction potential were studied. Here, it was established that during accelerations, there is a displacement of oxygen balance in various tissues with a tendency toward insufficient oxidation which depends on acceleration magnitude and duration as well as specific metabolic qualities of the tissues under study. For instance, the period necessary for the elimination of oxygen depth in the brain was 1.5—2.0 times shorter than for skeletal muscles.

In experiments where animals and humans were exposed to various atmospheric conditions during acceleration (normal, increased oxygen partial pressure, and decreased barometric pressure to 405 mm Hg), it was found that increased oxygen pressure improved resistance to prolonged accelerations. However, when general and cerebral hemodynamics were disrupted due to a high longitudinal acceleration component, this positive effect was eliminated by a disruption of gas exchange. Increased oxygen partial pressure (100 mm H₂O) increased human tolerance of 12 G by 35—40 sec. [ATD PRESS: 5098-F]

SUB CODE: 06 / SUBM DATE: none

Cord 4/4

BARER, A.S.; GOLCOV, G.A.; SOROKINA, Ye.I.

Physiological reaction of the human body during the action of maximum accelerations in time and intensity, directed along the spinal-thoracic axis. Change in the system of external respiration. Biul. eksp. biol. i med. 56 no.8:33-37 Ag '63.
(MIRA 17:7)

1. Predstavleno deystvitel'nym chlenom AMN SSSR V.V. Parinym.

BARER, A.S.; Priznialni uchastiye: GOLOV, G.A.; ZUBAVIN, V.B.; TIKHOMIROV, Ye.P.

Limit of human resistance to transverse acceleration and the physiological reactions of the organism. Probl.kosm.khol. 2:255-272 '62. (MIRA 16:4)
(ACCELERATION—PHYSIOLOGICAL EFFECT)

SOV/65-59-4-14/14

AUTHORS: Golov, G.S., Ignatenko, M.A. and Titova, A.A.

TITLE: The Lay-Out of Gas Fractionating Plants in Petroleum Refineries (O skhemakh gasofraktsioniruyushchikh ustanovok na neftepererabatyvayushchikh zavodakh)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4, pp 69-72 (USSR)

ABSTRACT: The authors refer to two articles by P.A.Smirnov which were published in Khimiya i tekhnologiya topliv i masel, 1958, Nr 2, p 7 and 1959, Nr 1, p 9. They suggest further modifications (Fig 1 and 2) and recommend that a fractionating absorber-de-ethaniser unit should be included in the design of gas fractionating plants which are used for the processing of gas and unstable gasoline obtained by catalytic cracking. Power consumption is considerably reduced. The degree of separation of the propane-propylene fraction can be increased when unstable gasoline and a calculated quantity of stable gasoline are used as absorbing agents. Two tables give comparative data on the yield

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SOV/65-59-4-14/14

The Lay-Out of Gas Fractionating Plants in Petroleum Refineries
of industrial products (in per cent mol). There are
2 figures and 2 tables.

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USCOMM DC-61,022

S/065/60/000/007/003/008/XX
E194/E484

AUTHORS: Pokhozhayev, V.D., Zaglodin, L.S., Golov, G.S., and
Kul'chitskaya, I.V.

TITLE: The Principles of the Rational Use of Hydrogen in
Processes of the Hydrodesulphurization of Engine Fuels

PERIODICAL: Khimiya i tekhnologiya topliv i masel 1960, No. 7,
pp. 1-6

TEXT: The output of high sulphur crudes is increasing and accordingly there is increasing demand for hydrosulphurization. Work on the development of a practical industrial hydrodesulphurization process for crude and distillates is being carried on in a number of research institutes including the All-Union Research Institute of the Petroleum Industry and the Groznyy Scientific Research Institute. The first plant has been developed by the design institute Giproneft' on the basis of data supplied by the All-Union Scientific Research Institute of the Petroleum Industry. A hydrodesulphurizing plant is operating successfully on an oil refinery. || The process is being further developed by the LengiprogaZ Institute. Distillates are hydrofined on aluminium-cobalt-molybdenum catalyst in the presence of hydrogen at a temperature of 340 to 420°C and pressures
Card 1/3

S/065/60/000/007/003/008/XX
E194/E484

The Principles of the Rational Use of Hydrogen in Processes of the Hydrodesulphurization of Engine Fuels

from 20 to 50 atm using the circuit shown in Fig.1. The procedure is described. Use of hydrodesulphurization is limited by lack of hydrogen and possible sources of hydrogen on refineries are discussed. The hydrogen content of available gas varies considerably depending upon the method of production. The hydrogen content of the gas also varies during the actual process of hydrodesulphurization as the hydrogen is used up and must be replaced part way down the circuit. Analyses of circulating gas are given in Table 1 and curves of the consumption of 100% hydrogen as function of its content in the circulating gas and discharge from the first reactor are given in Fig.2. Reaction and ballast gases accumulate in the circulating gas and the concentration of hydrogen falls. It is accordingly necessary to extract part of this circulating gas and to replace it by gas containing hydrogen. This increases the hydrogen consumption because the used circulating gas is used for fuel. In developing technological circuits for hydrodesulphurization of various petroleum fractions, the specific properties of the individual feed stocks should be considered in relation to the

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E194/E484

The Principles of the Rational Use of Hydrogen in Processes of the Hydrodesulphurization of Engine Fuels

concentration of hydrogen in the circulating gas. If a refinery has several hydrodesulphurization installations each consisting of two units, several types of fuel may be treated simultaneously each requiring different concentrations of hydrogen in the circulating gas, matters being arranged so that gas extracted from units requiring a higher concentration of hydrogen is delivered to units requiring a lower concentration and so on, see diagram of Fig.4. If the extracted gas is used for fuel in the usual way, the hydrogen consumption necessary in the hydrodesulphurization of various fuels is given in Table 2; the corresponding figures when the series system is used are given in Table 3. With the series system, for each ton of engine fuel refined there is an economy of 3.2 kilograms of hydrogen. Thus in a refinery treating six million tons of sulphur-containing crude a year which produces about two million tons of engine fuel requiring hydrodesulphurization, the use of the series hydrodesulphurization circuit gives an economy of 6400 tons of hydrogen a year. There are 4 figures and 3 tables.

ASSOCIATION: Lengiprogaz
Card 3/3

ASPEL', N.B.; GOLOV, O.S.; POKHOZHAYEV, V.D.

Some characteristics of industrial plants for the catalytic
reforming process. Khim.i tekhn.toopl.i masel 5 no.5:
1-7 My '60. (MIRA 13:7)

1. Lengiprogas.

(Petroleum refineries--Equipment and supplies)

GOLOV, G.S.; ASPHEL', N.B.; POSTNIKOV, N.I.; RATNER, Ye.M.

Combining processes of catalytic reforming. Khim.i tekhnol.i
masel 7 no.9:8-13 S '62. (MIRA 15:8)

1. Lengiprogaz.

(Petroleum--Refining)

ASPEL', N.B.; GOLOV, G.S.; BURSIAI, N.R.; MASLYANSKIY, G.N.

Domestic plants for catalytic reforming and the basic indices
of their operation. Khim. i tekhn. topl. i masel' 8 no.5:4-8
Miy '63. (MIRA 16:8)

1. Lengiprogaz i Vsesoyuznyy nauchno-issledovatel'skiy
institut neftekhimicheskikh protsessov.

GOLOV, G.V.; TRBT'YAKOV, M.A.; TORSHILOV, Yu.V.; DONSKOY, S.A.

Conditions for the service of linings of oxygen-blown converters with a capacity of 100-130 tons (Mg) during the conversion of vanadium cast iron. Stal' 25 no.6:537-538 Je '65.

(MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

AGAFONOV, S.L.; ALEKSEYEVA, A.N.; BELLYUSTINA, L.N.; GOLOV, I.I.;
GUSEV, O.V.; DMITRIYEVA, V.I.; YEVLAMPIYEVA, F.A.;
YELISEYEV, A.I.; ZHAVORONKOV, N.A.; ZHARKOV, S.A.;
KIR'YANOV, I.A.; KHAYNOV, L.A.; KUSTOV, K.L.; LBOV, F.A.;
LIPATOV, N.A.; LIPOVETSKIY, I.A.; MALYUGIN, V.N.; MARINOV,
N.N. [deceased]; MIKHAYLOV, A.N.; POTAPOVA, Ye.D.;
TRUKHMANOV, G.A.; UKHIN, V.A.; FILIPPOV, V.A.; CHEBURASHKIN,
A.M.; SHKOTOV, A.T.; GARANINA, L.F., kand. fil. nauk

[The city of Gorkiy; a guidebook] Gorod Gor'kii, Volgo-
Viatskoe knizhnoe izd-vo, 1964. 374 p. (MIRA 17:12)

AKSENOV, N.N.; BARSOV, I.P.; BARSUKOV, F.D.; BIZRUCHENKO, I.F.; BUROV, D.T.;
 BURLAY, A.A.; VASIL'YEV, G.I.; VOSTOKOV, Ye.I.; GLOV, M.A.;
 IL'IN, M.M.; KAMSYUK, S.A.; KOLESOV, A.M.; KOPOTEV, A.N.; LEVITAN,
 S.D.; LYSOV, G.B.; LYAL'CHUK, V.K.; L'VOV, N.A.; LYAPUNOVA, A.I.;
 MISHKOV, K.V.; NASTYUKOV, G.A.; NIGOF, V.N.; PESKOV, E.A.;
 PERKIL'YEV, A.P.; SARUKHANYAN, R.L.; SIDOROV, I.A.; SMIRNOV, A.N.;
 SURIN, P.I.; SYSOYEV, V.D.; TISHCHENKO, A.A.; FILIPPOV, G.P.;
 TOMICHEN, A.M.; YAKOVLEV, I.P.; MURAV'YEV, A.I., polkovnik, red.;
 ZHDINA, M.P., tekhn.red.

[Service clubs; a practical reference book] Klub voinskoj chasti
 (korablin); spravochno-metodicheskoe posobie. Moskva, Voen.isd-vo
 M-vo obor.SSSR, 1961. 342 p. (MIRA 14:4)

1. Russia (1923- U.S.S.R.) Glavnoye politicheskoye upravleniye
 Sovetskoy Armii i Voenno-Morskogo Flota. Upravleniye propagandy
 i agitatsii.

(Soldiers--Recreation)

KADLUBOVICH, G. [Kadlubovych, H.]; GOLOV, V. [Golov, V.]

Butt joint for glass heat-resistant pipes. Sil'.bud. 11 no.6:19
Ju '61. (MIRA 14:7)

1. Glavnyy spetsialist Gosstroya USSR (for Kadlubovich). 2. Glavnyy
mekhanik Stroitel'sko-montazhnogo upravleniya No.1 Dorozhnogo stroi-
tel'stva Tushno-Zapadnoy zheleznoy dorogi (for Golov).
(Pipe, Glass)

20-114-3-38/60

AUTHORS: Rabinovich, I. B., Golov, V. G., Yefimova, N. A., Rustamov, S.M.

TITLE: The Isotopic Effect in Compressibility and in the Association of Deuteroalcohols (Izotopnyy effekt v szhinayemosti i assotsiatsii deyterospirov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 3, pp 590-593 (USSR)

ABSTRACT: The paper under review is devoted to the investigation of the ultrasonic velocity a and of the density d in the interval between 10° and $60 - 80^\circ$ for CH_3OH and CH_3OD , and several others, as well as for D_2O . The adiabatic compressibility and the osmotic coefficients were measured. The deuteroalcohols are obtained by hydrolysis, with heavy water, of appropriate alcoholates of magnesium and aluminum. The ratio of the cryoscopic molecular weight and of the molecular weight obtained from the formula decreases in the following order: methyl alcohol, ethyl alcohol, n-butyl alcohol, as well as normal, iso-, and secondary butyl alcohol. For deuteroalcohols the acid ratio is by 2 - 5 % higher than for their hydrogen analogues. Although it is not possible to derive any accurate values of the degree of association from benzene

Card 1/4

20-114-3-38/60

The Isotopic Effect in Compressibility and in the Association of Deuteroalcohols

solutions of the alcohols, it is clear that the increase of the osmotic coefficients, with increasing concentration in alcohol, is caused by its degree of association. Therefore it follows from the results of the cryoscopic experiments that the deuteroalcohols are associated by the hydrogen bonds in a higher degree than their hydrogen analogues. This is also confirmed by the higher boiling point of the former, and also by the fact that substitution of hydrogen by deuterium in the alcohol hydroxyl leads to a reduction of its vapor pressure. The authors of the paper under review supported the statement made by Tarasov that, generally speaking, compression does not take place on the relatively solid hydrogen bonds but rather on the weaker Vandervaals' bonds between the chains (associates). Iso- and secondary butyl alcohol have higher compressibility than their normal primary analogue. Therefore alcohols with a ramified chain are characterized by higher compressibility than the primary n-alcohols. In all deuteroalcohols investigated the ultrasonic velocity is by 10 - 20 seconds lower than in the corresponding hydrogen analogues. On the other hand, the compressibility in the former is higher than in the latter. From the point of view

Card 2/4

20-114-3-38/60

The Isotopic Effect in Compressibility and in the Association of Deuteroalcohols

described in the paper under review this isotopic effect of the compressibility means that in the deuteroalcohols the intermediate chain interaction is somewhat weaker than in their hydrogen analogues. The occurrence of the temperature minimum of the curve of compressibility in water, as well as the presence of the maximum of density, can be explained by superposition of two factors at the increase in temperature and also by the transition of water from a more strongly associated state into a less strongly associated state, with a denser packing of molecules (reduction in compressibility). The authors of the paper under review maintain that, as compared to normal water, the decrease in the degree of association in heavy water is delayed with respect to temperature. In a way, the retardation of ultrasound in the substances investigated, when hydrogen is substituted by deuterium, is also caused by the increase in molecular weight. There are 3 figures, 3 tables and 15 references, 8 of which are Slavic.

Card 3/4

20-114-3-38/60

The Isotopic Effect in Compressibility and in the Association of Deutero-alcohols

ASSOCIATION: Institute of Chemistry, Gor'kiy State University imeni N. I. Lobachevskiy
(Institut khimii Gor'kovskogo gosudarstvennogo universiteta im. N. I. Lobachevskogo)

PRESENTED: December 4, 1956, by A. N. Frumkin, Member of the Academy

SUBMITTED: September 1, 1956

Card 4/4

5(3)

SOV/63-4-1-29/31

AUTHOR: Gol'dberg, N.A., Golov, V.G.

TITLE: Reactions of Cyanamide With Ketones (Reaktsii tsianamida s ketonami)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 1, p 138 (USSR)

ABSTRACT: The interaction of cyanamide with ketones produces N-cyan-ketoimines. Cyanamide is obtained from a suspension of technical calcium cyanamide in water by means of gaseous carbon dioxide at 40°C. From the precipitate crystalline cyanamide is separated. Solutions of cyanamide in ketones at the molar ratio 1 : 2 were kept at 60°C. After several hours the reaction was completed and N-cyanketoimines had formed. These are soluble in the corresponding ketones, in alcohol and in acetic acid.

Card 1/2 There are: 1 table and 1 Soviet reference.

↑
Reactions of Cyanamide With Ketones

SOV/63-4-1-29/31

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut azotnoy
promyshlennosti (State Scientific Research Institute of the
Nitrogen Industry)

SUBMITTED: August 26, 1958

Card 2/2

RABINOVICH, I.B. (Gor'kiy); Pri uchastii: GOLOV, V.G.; NIKOLAYEV, P.N.;
VOLOKHNOVA, Z.V.; KUCHERYAVYY, V.I.

Effect of substituting deuterium for hydrogen on the velocity of
sound and the compressibility of liquids. Zhur. fiz. khim.
34 no.2:423-431 F '60. (MIRA 14:7)

1. Gor'kovskiy gosudarstvennyy universitet im. N.I.Lobachevskogo,
Institut khimii.

(Deuterium) (Sound--Speed) (Compressibility)

GOL'DBERG, N.A.; GOLOV, V.G.

Possible use of cyanamide as a solvent in cryoscopy. Zhur.VKHO 6
no.4:467 '61. (MIRA 14:7)

1. Dzerzhinskiy filial Gosudarstvennogo instituta azotnoy
promyshlennosti i produktov organicheskogo sinteza.
(Cyanamide) (Cryoscopy)

GOL'DBERG, N.A.; GOLDOV, V.G.

Apparatus for studying the decomposition kinetics of "blowing agents." Zav.lab.27 no.5:612-614 '61. (MIRA 14:5)

1. Dzerzhinskiy filial nauchno-issledovatel'skogo i proyektного instituta azotnoy promyshlennosti i organicheskogo sinteza.
(Scientific apparatus and instruments)
(Porous materials)

GOL'DBERG, N.A.; GOLOV, V.G.

Kinetics and mechanism of dimerization reactions of cyanamide.
Zhur.prikl.khim. 35 no.7:1592-1597 J1 '62. (MIRA 15:8)
(Cyanamide) (Polymerization)

GOL'DBERG, N.A.; GOLOV, V.G.

Kinetics of the reaction of dimerization of cyanamide in
aqueous solution flowing through a heated tube. Zhur. prikl.
khim. 36 no.5:994-1000 My '63. (MIRA 16:8)

(Cyanamide)

(Polymerization)

AUTHOR:

Golov, V.I.

SOV/113-58-12-14/17

TITLE:

The Activation of Piston Rings of an Engine With Radioactive Zinc, by the Method of Hot Zinc Plating (Aktivirovaniye porshnevnykh kolets dvigatelya radioaktivnym tsinkom sposobom goryachego tsinkovaniya.)

PERIODICAL:

Avtomobil'naya promyshlennost', 1958, Nr 12, pp 39-40 (USSR)

ABSTRACT:

There are several methods for applying radioactive isotopes in the study of the wear in piston rings: irradiation in the nuclear reactor, introduction of the radioactive isotopes into the liquid metal before casting, insertion of radioactive samples, etc. These methods have many drawbacks. A new method has now been developed by NAMI using hot zinc plating for the activation of piston rings. In a special device, 5-6 rings are collected (Figure 1). On every ring, a groove 0.6 mm broad and 0.5 mm deep is made. This groove is filled with zinc, to which the isotope Zn-65 has been added. The specific activity is 0.2 mCurie per gram. The temperature during zinc plating is kept between

Card 1/2

30V/113-58-12-14/17
The Activation of Piston Rings of an Engine With Radioactive Zinc, by the
Method of Hot Zinc Plating

430 and 460°C. Figure 2 shows a ring after processing. The mentioned method still has several drawbacks: 1) the large volume of the tank, which complicates the protection against radiation; 2) the low percentage of radioactive zinc which fills the grooves; 3) the total activity is increased with the specific activity, which also complicates protection against radiation. There is 1 set of diagrams, 1 photo, and 3 Soviet references.

ASSOCIATION: NAMI

Card 2/2

AROMOV, D.I.; GOLOV, V.I.; LEENER, M.S.

Effect of antiknock additives to gasoline on engine wear. Khim.
i tekhn. topl. i masel 5 no.7:43-46 JI '60. (MIRA 13:7)
(Gasoline--Antiknock and antiknock mixtures)

GOLOV, V.K.; OMAROV, V.S.; NASHKIN, B.Ye.; DORCHIN, V.A.; DOMOKHIROV, K.D

Semidry pressing of steel casting equipment. Ogneupory 17 no.5:
195-201 My '52. (MLRA 8:9)

1. Nizhne-Tagil'skiy ogneuporny zavod
(Foundry machinery and supplies)

GOLOV V.K.

OL'KHOVSKIY, I.A.; GOLOV, V.K.; BAS'YAS, I.P., redaktor; KHL'NIK, V.P.,
redaktor izdatel'stva; KOVALENKO, M.I., tekhnicheskiy redaktor.

[Advanced experience in producing cast steel products; experience
of the Novo-Tagil refractory plant] Peredovoi opyt proizvodstva
staleraslivochnykh izdelii; opyt novatorov N.-Tsil'skogo ognepor-
nogo zavoda. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po cherno-
i tsvetnoi metallurgii, 1954. 59 p. (MLA 7:11)
(Powder metallurgy)

PAPAKIN, Kh.M.; DORONIN, V.A.; Prinimali uchastiye: OBUKHOV, A.A.;
GOLOV, V.K. [deceased]; OSTROVSKIY, B.N.; MURATOV, A.A.;
~~DUMAZHINOV, I.D.~~

Molding fire clay grates for coke ovens from moist mixture.
Ogneupory 26 no.9:402-404 '61. (MIRA 14:9)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Nizhniy tagil---Fire brick)

L 45967-66 EWT(1)/EWT(m) SCTB JKT/DD/RD/JT/GD

ACC NR: AT6030696

SOURCE CODE: UR/0000/66/000/000/0052/0055

AUTHOR: Perfil'yev, N. P.; Men'shova, V. M.; Golov, V. K.

ORG: none

TITLE: Air dessication in cabin-atmosphere life-support systems

SOURCE: Konferentsiya po kosmicheskoy biologii i meditsine, 1964. Materialy. Moscow, Inst. mediko-biol. problem, 1966, 52-55

TOPIC TAGS: life support system, space biology

ABSTRACT: A diffusion method for dessicating air in a cabin-atmosphere regeneration system is shown in Fig. 1. In this system, moist cabin air is fed through the

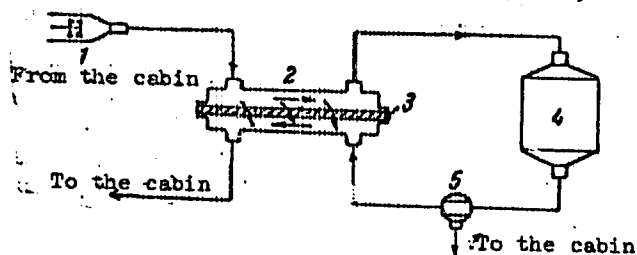


Fig. 1. Schematic diagram of a diffusion method of air drying

1 - Ventilator; 2 - diffusion dryer;
3 - porous membrane; 4 - regenera-
tor; 5 - bypass valve.

Card 1/2

Card 2/2

GOLOV, V.M.

POL'KIN, S.I.; KUZ'KIN, S.P.; GOLOV, V.M.

Radiographic method of studying the interaction of flotation
reagent with the surface of minerals. TSvet.net. 28 no.1:13-19
Ja-F '55. (MIRA 10:10)

1. Nintsvetmetzoloto.
(Flotation) (Radiography)

Golov, V. M.

137-1958-3-4525

: Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 7 (USSR)

AUTHORS: Kuz'kin, S. F., Golov, V. M.

TITLE: The Action of Fe Compounds in Flotation of Beryl (Deystviye soyedineniy zheleza pri flotatsii berilla)

PERIODICAL: Sb. nauchn. tr. Mosk. in-t tsvetn. met. i zolota i VNITO
tsvetn. metallurgii, 1957, Nr 26, pp 7-20

ABSTRACT: An examination of the results of research dealing with the effect of Fe compounds on the flotation of beryl and some accompanying minerals, by means of cation and anion collectors. Radioactive tracers were employed in the course of the studies. The absolute amount of the attached substance was determined directly on the surface of the powders, rather than by the residual concentration of the solution. The following was established: in an acid medium the following various Fe compounds become irreversibly attached on the surface of minerals: cations of Fe, products of hydrolysis of FeCl_3 , positively charged sol of Fe hydroxide. In an alkaline medium the attachment of radioactive Fe is at a minimum and is independent of the nature of minerals involved. Starting with Fe^{++} and the products of hydrolysis

Card 1/2

137-1958-3-4525

The Action of Fe Compounds in Flotation of Beryl

of FeCl_3 , the activation capacity of various Fe compounds decreases toward the positively charged sol of Fe hydroxide; Fe sorbed in an alkaline medium with a pH of 9-11 is a very weak activator of some minerals. Oleate of Na reacts chemically in a definite proportion with tri-valent Fe adsorbed in an acid medium; the resulting compound is soluble in glycerin. The area of minerals covered by this flotation-active compound does not exceed that of the saturated monomolecular layer. The most rational methods for neutralization of the activating effect of Fe compounds were evolved, namely: a) the employment of reagents that do not form chemical compounds with the activator (IM-11, lauryl-amine); b) prevention of the fixation of ions and of Fe compounds on the surface of minerals by means of transforming them, within the pulp mass, to an insoluble or non-adsorbent state (by utilizing alkaline depressers) and removing the adsorbed Fe from the surface of minerals by means of acid solutions.

A. Sh.

Card 2/2

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 4 (USSR) SOV/137-58-12-23933

AUTHORS: Kuz'kin, S. F., Golov, V. M.

TITLE: The Action of Calcium Compounds in Beryllium Flotation (Deystviye soyedineniy kal'tsiya pri flotatsii berilla)

PERIODICAL: Sb. nauchn. tr. Mosk. in-t tsvetn. met. i zolota, 1957, Nr 27, pp 43-51

ABSTRACT: The cause of diminished extraction of Be and breakdown in selection in highly caustic media is the formation, on mineral surfaces, of a chemical compound between the Ca ion adsorbed on the mineral surfaces and the collector. Methods of neutralizing the harmful effects of Ca compounds are suggested.

K. A.

Card 1/1

SMIRNOV, V.N.; IVANOVA, Ye.I.; GOLOV, V.M.

Diurnal and seasonal dynamics of the liberation of soil carbon dioxide into the atmosphere in conifer-hardwood and hardwood stands of the southern belt of the forest zone. Nauch. dokl. vys. shkoly; biol. nauki no.1:194-198 '64. (MIRA 17:4)

1. Rekomendovana kafedroy lesnogo pochvovedeniya Povolzhskogo lesotekhnicheskogo instituta.

WOSKIN, R.A., kand.tekhn.nauk, red.; BORISOV, Yu.S., inzh., red.;
PIKTMAN, V.D., inzh., red.; MIKHAYLOVSKIY, V.I., inzh., red.;
GOLOV, V.P., inzh., red.; POPOV, A.T., inzh., red.; EL'KIND,
V.D., tekhn.red.

[Modernization and repair of machinery plant equipment] Moderni-
zatsiya i remont oborudovaniya mashinostroitel'nykh zavodov. Pod
red. R.A.Woskina. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.
lit-ry, 1959. 261 p. (MIRA 13:3)

1. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy pro-
myshlennosti. Tsentral'noye pravleniye.
(Industrial equipment--Maintenance and repair)

GOLOV, V.P.; MAKHITAROV, L.G.

Reliable stabilization of an embankment. Put' i put. khoz. 9
no.10:31-32 '65. (MIRA 18:10)

1. Nachal'nik Samberskoy distantsii L'vovskoy dorogi (for
Golov). 2. Zamestitel' nachal'nika Samberskoy distantsii
L'vovskoy dorogi (for Makhitarov).

SHESTANOV, A.; GOLOW, Yu.

From the history of fire departments. Pozh.delo 8 no.4:30
Ap '62. (MIRA 15:4)
(Fire departments)

ACC NR: AR6029420

SOURCE CODE: UR/0196/66/000/005/VO17/VO17

AUTHOR: Kazantsev, F. S.; Golov, Yu. F.

TITLE: Operation of high-pressure gas-discharge lamps in circuits containing ballast resistors

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 5V89

REF SOURCE: Uch. zap. Mordovsk. un-t, vyp. 30, 1965, 46-56

TOPIC TAGS: high pressure, ~~lamp~~, gas discharge, ~~lamp~~, electric lamp, *resistor*

ABSTRACT: Operating conditions of a PRK-2 lamp working with a resistive ballast (a PZh-110 x 500 incandescent lamp or a wire rheostat) and with an inductive ballast were experimentally investigated at a supply-voltage varying within 180--240 v. These conclusions are reported: (1) The gas-discharge lamp and its circuit parameters substantially depend on the voltage waveshape available; with a trapezoid shape, the current gaps drop to one-half and lower, which ensures much better parameters of both the lamp and the circuit (p. f. = 0.88; restarting voltage is reduced by 20%; the amplitude coefficient of the discharge current is lower than that with the inductive ballast); this voltage waveshape occurs when the lamp is connected to a 3-wire system without neutral; (2) In a no-neutral circuit, stable operation of the PRK-2 lamp with a small resistive ballast causing a 15--20% power loss is possible; (3) The ballast resistor should have an irregularly rising characteristic with a high temperature coefficient. Six figures. Four tables. Bibliography of 3 titles. I. Tikhomirov [Translation of abstract]

Card 1/1

SUB CODE: 09

UDC: 621.327.534.2.032.4

MINEYEV, Yu.I., inzh.; GOLOV, Yu.S., inzh.

Gas exhaust systems on ships with underwater wings. Sudostroenie
28 no.8:27-30 Ag '62. (MIRA 15:8)
(Planing hulls) (Exhaust systems)

ACC NR: AP7002649

(N)

SOURCE CODE: UR/0413/66/000/023/0197/0197

INVENTOR: Mineyev, Yu. I.; Chernigin, Yu. P.; Golov, Yu. S.; Sorokin, B. I.

ORG: None

TITLE: A hydraulic servo drive for rudder control. Class 65, No. 146667

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 197

TOPIC TAGS: marine engineering, hydrofoil, rudder, hydraulic device, servosystem

ABSTRACT: This Author's Certificate introduces a hydraulic servo drive for controlling the rudders on hydrofoil boats. The unit contains a slide-valve device for distribution of the working fluid to the cavities above and below the piston in the power cylinder, a hydraulic pump and a system of check valves. The technical and economic indices of the control system are improved, design is simplified and reliability is increased by using a plunger pump connected to a common hydraulic system. The pump rotor is linked to the steering mechanism while the suction and discharge lines are connected to the master hydraulic cylinder. The master cylinder is rigidly fastened to the power cylinder and the master cylinder rod interacts with the slide valve. The valve housing is linked to the hydraulic power cylinder of the tiller unit.

SUB CODE: 13/ SUHM DATE: 21Sep60

Card 1/1

BOYKOVA-PACHNEROVA, E.; BRUTAR, V.; GOLOVA, B.

Increase of lactation. Prakt. lek., Praha 31 no.18:394-396
20 Sep 1951. (CML 21:1)

1. Of the First Obstetrical Clinic (Head -- Prof. K. Klaus, M.D.)

YAKIMOV, M.A.; MISHIN, V.Ya.; GOLOVA, L.F.

Solubility in the system $TlNO_3 - HNO_3 - H_2O$ at 0 and 25°C.
Zhur. neorg. khim. 8 no.6:1470-1472 Je '63. (MIRA 16:6)

(Thallium nitrate) (Nitric acid)
(Solubility)

FILE NO	ENT(=)/E-F(1)	RE
ACC NO	26000783	SOURCE CODE: TR/0062/66/000/002/0257/0262

AUTHOR: Andrianov, K. A.; Dezagova, A. K. Golova, M. I.

لغة

One: Institute of Organoelemental Compounds, Academy of Sciences, USSR
Inst. of Elementor. Chemistry of Sovietemiy Akademii nauk SSSR

TITLE: The methacrylation of (chloromethyl) ethoxysilanes in the presence of catalytic amounts of acid

SOURCE: AN SSSR. Investiya. Seriya khimicheskaya, no. 2, 1966, 257-262.

TOPIC TAGS: chemical reaction, reaction mechanism, organosilicon
compound, siloxane

ABSTRACT: The nucleophilic substitution of the chlorine of the α -chloromethyl group of ethoxysilane with a methacrylic group was investigated. The reaction will go in the absence of solvents, but it proceeds more readily, giving high yields at lower temperatures, in the presence of catalytic amounts of HCl or organic acids. The proposed reaction mechanism -- formation of an intermediate reaction product with the acid catalyst and decomposition of this oxonium compound by heating -- was confirmed experimentally. The following new compounds were

Card 1/2

UDC: 542.91+546.287

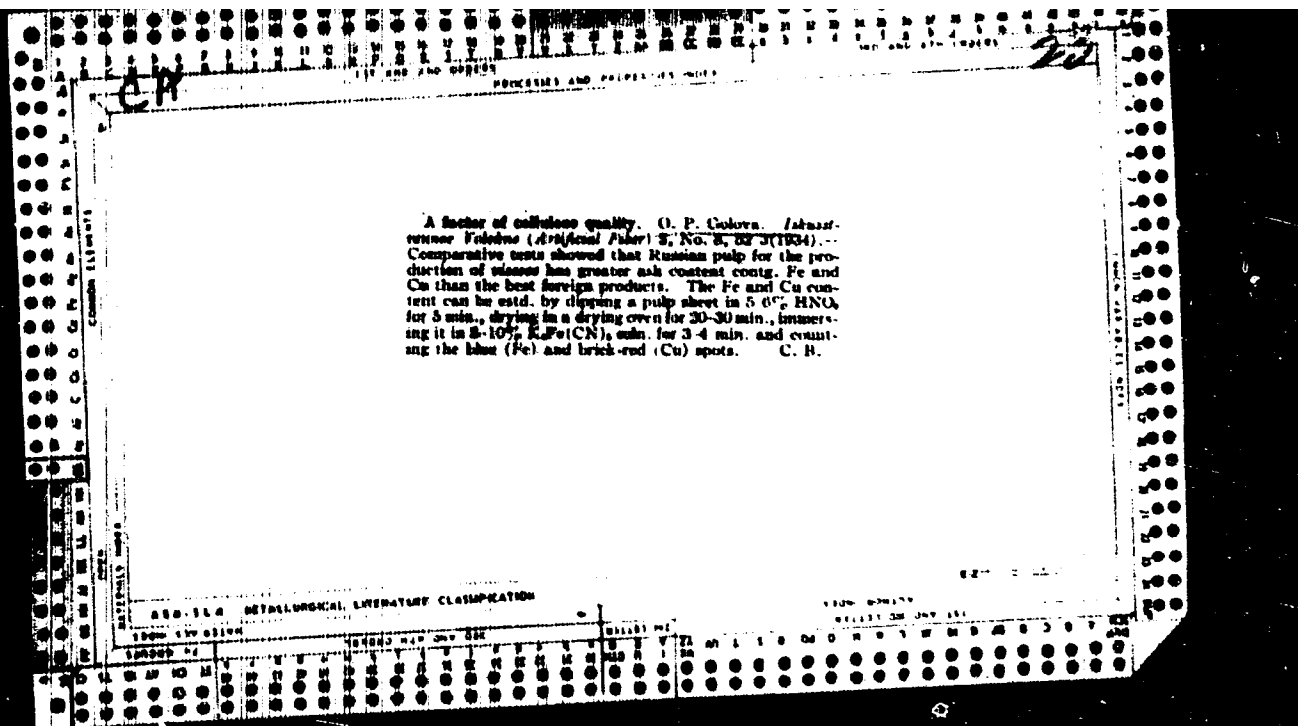
1. 251-66

ACC NO: AP6009793

synthesized and characterized: (acetoxymethyl)dimethylethoxysilane,
(acetoxymethyl)methyldiethoxysilane, and (acetoxymethyl)triethoxysilane.
Orig. art. has: 5 tables and 5 equations.

SUB CODE: 01/ BURN DATE: 02Sep63/ ORIG REF: 001

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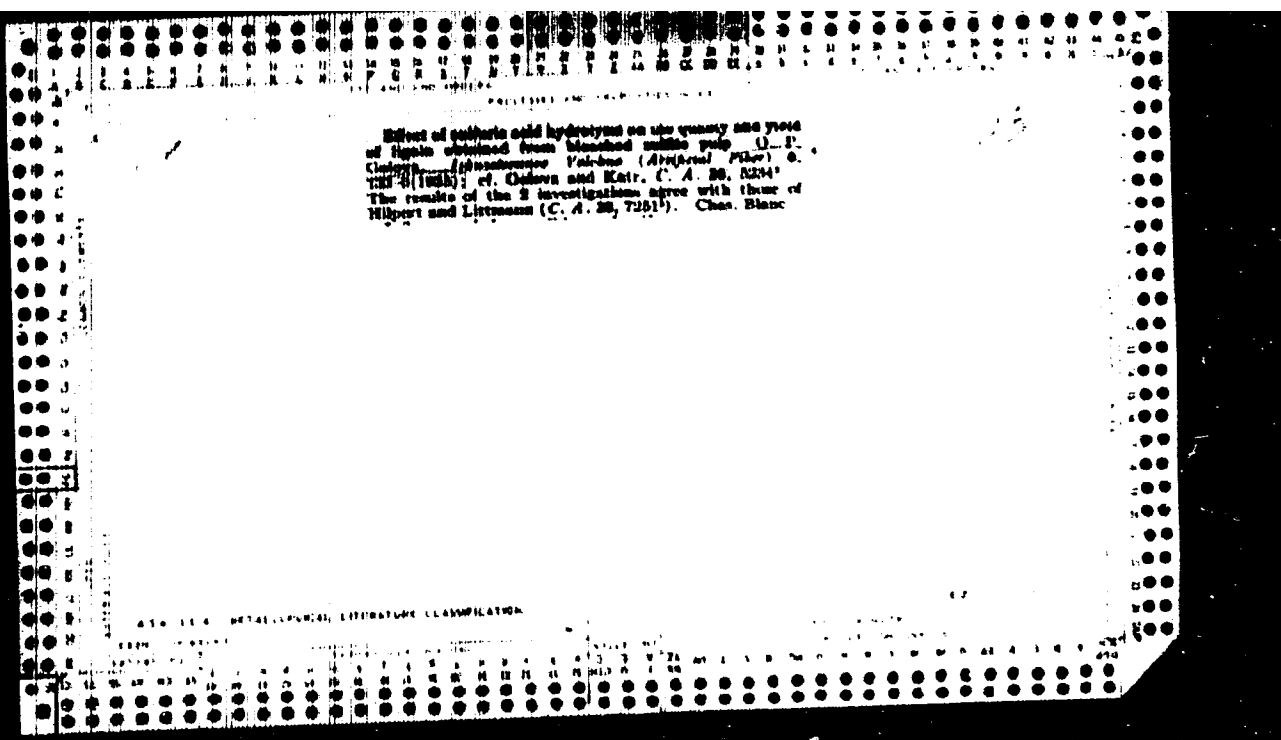


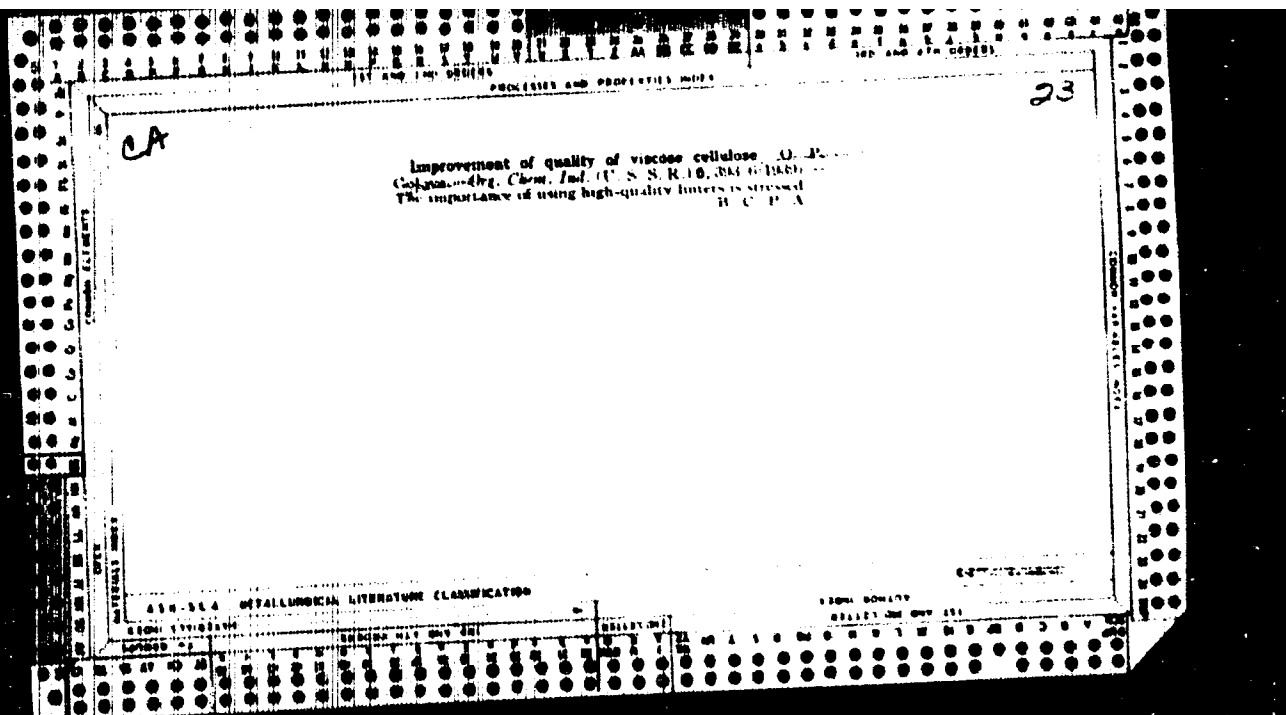
PROCESS AND PREPARATION

73

Determination of the viscosity of solutions for viscous
papers. (D. P. Chelva, *Sovetskoye Prosv. 13, No. 10-11, 34-41(1984)*; *ibid.* 9, No. 3(1980).—The
determinations were made by the method in the Tro-
skitskiy capillary viscometer, which is illustrated and
described (Chas. Blanc

ADD. 1.1.1. (TALLUPOH). INTERLUDE CLASSIFICATION





23

CA

Transformations of the macromolecules of cellulose in an ammoniacal solution of cupric hydrosulfide. O. P. Golova. *Chem. Abstr.* 47, 31-3; *Doklady Akad. Nauk S.S.S.R.* 47, 20-2 (1945) (in English); cf. C.A. 40, 1683. After the elimination of air from the cuprammonium soln. and from the histological canals of cellulose (I) soln. soln. the degree of polymerization (D.P.) was 1000-10,000 glucose units in the chain, corresponding to a mol. wt. of 1,000,000. This is not the max. value for native I, because of the purification to which the I has been subjected. This is true also because of the change in viscosity of I in the presence of O. The introduction of 3.5% $\times 10^3$ mol. of O into a cuprammonium soln. of I changes the viscosity so that the D.P. is 2500-3000 glucose units. 0.6 $\times 10^3$ mol. of O decreases the D.P. to 50-60 glucose units. The oxidized cellulose isolated from such solns. examined by the iodine-no. method of Bergman and Macherehner (C.A. 25, 1071) and by the detn. of the yield of gluconic acid (cf. preceding abstr.), also gives values of 50-60 glucose units. C. J. West

450-554 METALLURGICAL LITERATURE CLASSIFICATION

SECTION	SUBSECTION	CLASSIFICATION
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91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

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Inhibition of the oxidative decomposition of cellulose
O. P. Chibrikov, V. I. Ivanov, and I. I. Nikolaeva. *Dokl. Akad. Nauk S.S.S.R.* 28, 899-902 (1947); *Chem. Zvest. (Russian Zone Ed.)* 1948, 1, 829-30; cf. C.A. 42 5109c. — Viscosity measurements have shown that, when O₂ is passed into a Cu-NH₃ soln. of cellulose, a rapid reduction of the degree of polymerization (D.P.) of the cellulose from 10,000 to 100-150 takes place. Further breakdown of the mol. chain is slow. The process was interrupted at the point at which the reaction began to slow down by removing the NH₃ in vacuo and blowing A through the soln. The low-mol. products were then sepd. by extn. with water. When the water-insol. portion was again dissolved in the Cu-NH₃ soln. and oxidized with atm. O₂, the viscosity again decreased. The D.P. of the water-insol. fraction changed but little during the 2nd or 3rd stage of the oxidation, values of 100 and 80 being reported. Assuming that the low-mol. products formed were responsible for inhibiting the further decompn. of the cellulose, expts. were carried out to det. the effect of adding glucose and cellobiose to the Cu-NH₃ soln. A definite inhibiting effect was observed at a mol. ratio of glucose to cellulose of ~ 2000. The ratio for cellobiose was ~ 2500. Even formaldehyde had an inhibiting effect. The water-insol. degradation products of cellulose had a slight inhibiting effect. It is supposed that, in nature, where the labile cellulose chain remains in the plant tissue, the observed inhibiting action is due to readily oxidized substances which are responsible for the formation of lignin; a substance always present with cellulose. Coniferin and coniferyl alcohol are such substances. Both of these compounds, when added to a Cu-NH₃ soln. of cellulose, inhibited its oxidative decompn. M. G. Moore

GOLOVA, O. P.

Golova, O. P., Ivanov, V. I., and Nikolayeva, I. I. "Molecular weight of cellulose and the appearance of frictional action during its acidifying decomposition," in symposium: Issledovaniya v oblasti tsellyulozy i yeye sputnikov, Moscow-Leningrad, 1948, p. 27-35 # Bibliogt: 10 items

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and Its Retardation."

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~~REDAKTOR~~; SHEVCHENKO, O.N., tekhnicheskiy redaktor.

[Molecular weight of cellulose] O molekuliarnom vese tselliu-
lozy. Moskva, Izd-vo Akad. nauk SSSR, 1949. 114 p. (MLBA 8:8)
(Cellulose)